TWO NEW SPECIES OF *CEPHALOSCYMNUS* CROTCH FROM MEXICO WITH NOTES ON OTHER SPECIES (COLEOPTERA:COCCINELLIDAE)

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ABSTRACT

Two new species of *Cephaloscymnus, mexicanus* and *minutus,* are described, and additional distribution data are listed for some previously described species.

The genus *Cephaloscymnus* in North America was treated by Gordon (1970). The purpose of the present paper is to present additional information on distribution and genitalia of previously described species and to describe 2 new species. Material discussed herein is in the Canadian National Collection [CNC] and the U. S. National Museum [USNM].

Cephaloscymnus zimmermanni zimmermanni Crotch Fig. 1

A single specimen of this subspecies from Arkansas has been examined. This represents an extension of the known range (Gordon, 1970: 67), and it is interesting that this specimen is typical of the nominate subspecies and does not represent an intergrade between *zimmermanni*, s. str., and *z. australis* Gordon.

Figure 1 is an enlarged view of the siphonal apex of the male genitalia of *zimmermanni*, s. str.

Cephaloscymnus mexicanus Gordon, new species Fig. 2-6

Holotype male: length 2.60 mm, greatest width 1.52 mm. Form elongate, dorso-ventrally flattened, widest at middle of elytra. Color reddish-brown dorsally except clypeal area of head and lateral border of pronotum paler yellowish-brown, elytron with faint greenish-bronze sheen; ventral surface black except hypopleuron and epipleuron reddish-brown, mouthparts, legs, lateral border of third and fourth sterna and entire apical sternum yellow. Head and pronotum densely, coarsely punctured, punctures separated by less than their diameter, becoming denser on explanate border of pronotum; punctures on elytron not dense, separated by at least their diameter. Pubescence grayish-white, short on head, tightly appressed, long on pronotum and head, semi-erect. Genitalia with basal lobe longer than paramere, parallel-sided with rounded apex in ventral view, curved in lateral view, with dorsal

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keel; paramere slender, nearly straight, narrowed toward apex (Fig. 2, 3); sipho as in Fig. 4, 5.

Female: similar to male except spermathecal capsule curved, apex bluntly rounded (Fig. 6).

Variation: length 2.48 to 2.60 mm, width 1.45 to 1.52 mm.

Holotype: male [CNC], MEXICO, 30 mi. W. Durango, Dgo., 8000', 4-V-1961, Howden & Martin.

Paratypes: total 2 [CNC and USNM], MEXICO: 7500', nr. Jame, 33 mi. S. E. Saltillo, Coahuila, 25-VII-1963, H. F. Howden; 3 mi. E. El Salto, Durango, 21-VI-1964, H. F. Howden.

Another specimen of *Cephaloscymnus* in the CNC from Jacala, Hidalgo, Mexico, is probably this species, but it is a female that doesn't match the type series exactly.

The male genitalia of *mexicanus* are of the type found in C. z. *australis*, but the basal lobe is relatively longer, more slender and not as abruptly curved in *mexicanus*. C. z. *australis* also differs from *mexicanus* in having the pronotal punctures extremely dense, usually contiguous, and the pronotum entirely red, not paler laterally.

The holotype has the head indented medially, obviously a result of damage, and 1 middle leg and 1 hind leg are missing. The specimen was teneral when collected and so was more susceptible to damage.

Cephaloscymnus occidentalis Horn Fig. 7

This is the first Mexican record for this species. Two specimens in the CNC bearing the following data are this species: "Nr. San Jose Beach, 40 mi. SW. Cd. Obregon, Sonora, Mex., 16-23.V.1961, Howden & Martin, at light"; "Rio Yaqui, 12 mi. W. Cd. Obregon, Sonora, Mex., 15-V-1961, Howden & Martin". Figure 7 is an enlarged view of the siphonal apex of the male genitalia.

Cephaloscymnus laevis Gordon Fig. 8, 9

This species was described (Gordon 1970) from a single male from Nogales, Arizona, in the California Academy of Sciences collection. There are 2 examples of *laevis*, a male and female, in the CNC, both labeled "10 mi NE. Jacala, Hidalgo, Mex., VIII.1-3.1960, Howden. This is not only the first Mexican record of the species but also represents a great extension of the known range.

Figure 8 is an enlarged view of the siphonal apex of the male genitalia. Figure 9 is the female spermathecal capsule, not previously illustrated.

Cephaloscymnus gnomus Gordon, new species Fig. 10

Holotype female: length 1.70 mm, greatest width 1.00 mm. Form elongate, somewhat convex, widest at middle of elytra. Color black except antero-lateral angle of pronotum and apical third of elytron obscurely reddish-brown, legs and mouthparts yellow or yellowish-brown. Punctures on head and pronotum dense, coarse, separated by their diameter or less, becoming somewhat contiguous along lateral margin of pronotum; punctures



Fig. 1-10. Genitalia of *Cephaloscymnus* spp.: 1) siphonal apex, *C. zimmer-manni zimmermanni*; 2 and 3) ventral and lateral aspects of phallobase, *C. mexicanus*; 4 and 5) entire sipho and siphonal apex, *C. mexicanus*; 6) sper-mathecal capsule, *C. mexicanus*; 7) siphonal apex, *C. occidentalis*; 8) siphonal apex, *C. laevis*; 9) spermathecal capsule, *C. laevis*; 10) spermathecal capsule, *C. gnomus*.

on elytron dense, coarse, subequal in size to pronotal punctures, separated by their diameter or less. Pubescence grayish-white, short and tightly appressed on head, long and semi-erect on pronotum and elytron. Genitalia with spermathecal capsule feebly curved before apex, apex bluntly pointed (Fig. 10).

Male: not known.

Holotype: female [CNC], MEXICO: El Salto de Agua, San Luis Potosi, 28-30-VII-1960, H. Howden.

The extremely small size, nearly all black dorsal surface and coarse, dense punctures on the elytron distinguish *gnomus* from any previously described species. *C. occidentalis* approaches *gnomus* most closely in size but has the elytral punctures much less dense on the elytron than on the pronotum as do all other presently known species of *Cephaloscymnus* except *gnomus*. The shape of the spermathecal capsule is also completely different from those previously figured (Gordon 1970:68).

References

GORDON, R. D. 1970. The genus Cephaloscymnus Crotch in North America (Coleoptera:Coccinellidae). Proc. Ent. Soc. Washington, 72:66-70.

Coleopterists Newsletter, (Cont. from p. 44)

Lawrence, George Marshall, Bob and Maria Murray, Charles and Lois O'Brien, Manuel Pescador, Edgar and Mary Riek, Elbert Sleeper, Billy D. Stallings, Barry and Buena Valentine, and Janice White.—Horace R. Burke, William W. Gibson, Robert R. Murray.

THE FOURTH OF JULY, OR WHAT'S IN A DATE? A PLEA

The important date of the American calendar is considered by one segment of the American populace to fall on 4 July and by another segment to occur on July 4. Subscribing to the first system is the American military and to the second, various institutions of the Federal Government and at least some State governments. Under the first system the date is abbreviated to 4.7.1974or 04/07/74 or 4-7-74 or 4 VII 74 or other variations and, under the second, to 7.4.1974 or 07/04/74 or 7-4-74 or VII 4, 74 or other variations. This can, understandably, lead to confusion by adherents of the one system of notation when faced with the other.

Both systems are deeply entrenched. The first is used, to my knowledge, almost universally outside the U.S. No standardization can be expected for general use.

Coleopterists are concerned when it comes to recording and citing collection data. Editorial policy of the Coleopterists Bulletin wisely requires that the month be written in Roman numerals for collection data and, arbitrarily but in accordance with the more widespread international system, that the whole be written in the order day-month-year, i.e. in units of increasing magnitude. But anyone working with museum specimens is likely to have had to decide which numeral indicates the day and which the month in data labels